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Achieving Anonymity Against Major Face Recognition Algorithms

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Abstract: An ever-increasing number of personal photos is stored online. This trend can be problematic, because face recognition software can undermine user privacy in unexpected ways. Face de-identification aims to prevent automatic recognition of faces thus improving user privacy, but previous work alters the image in a way that makes them indistinguishable for both computers and humans, which prevents a wide-spread use.

We propose a method for de-identification of images that effectively prevents face recognition software (using the most popular and effective algorithms) from identifying people, but still allows human recognition. We evaluate our method experimentally by adapting the CSU framework and using the FERET database. We show that we are able to achieve strong de-identification while maintaining reasonable image quality.

Category / Keywords: Face recognition; Anonymity

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